



Improving the MPAG Processing Flow

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- 1. Introduction**
2. Reconfiguring the PAG List
3. Proposal for MPAG Review Scheduling System
4. Conclusions



Responding to Industry Needs

Challenges

- OET Lab receiving increasingly **complex products** with several technologies under PAG
- Time-to-market is critical: competing requests from manufacturers for meeting **market deadlines**
- **Pressure** from manufacturers **on TCBs** for faster reviews and application submittal

Actions

- Reconfiguring the PAG list for **better defined items** that require FCC help/scrutiny
- Introduction of PAG **item checklists** to improve review and processing efficiency (Labs and TCB know what is expected)
- Activation of the proposed **MPAG scheduling** system



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Changes in the PAG List

- KDB 388624-D02-v18rx featured several **item removals**
- **Basic approach:** is to have on the **PAG list** technologies/processes that include, but not limited to, any of the following features
 - require scrutiny, e.g., as test results are not consistent
 - not mature enough for routine compliance testing
 - require complex, customized guidance not yet supported by KDB publications
- Changes in the PAG list may warranted when some **items are not** sufficiently well defined.
- Items **may be re-introduced** in a different, upgraded format, to clearly show the **specific needs** for the FCC review



Examples: Old v17r05 Removals and Justifications (I)

- **SAREXC:** *Portable transmitters operating with source-based, time-averaged maximum output power according to wireless network or infrastructure requirements and separation distance requirements exceeding the “SAR Exclusion Threshold” in KDB Publication 447498 by either: (a) 8 times or more, for compliance with general population exposure requirements; or (b) 20 times or more, for compliance with occupational exposure requirements.*

Rationale: the issue is not covered in 447498, no related guidance available to address what is required when a device shows compliance but was evaluated at eight times (or more) above the exemption levels.



Examples: Old v17r05 Removals and Justifications (I)

- **FACTOR:** *When KDB Publication 447498 and other KDB publications referenced therein do not establishing procedures that readily support the form factor, design or implementation of a product or exposure condition, or when non-standard phantom configurations or test procedures are used for SAR testing.*

Rationale: Included in the updated “PHANTOM” item.

- **PWRINC:** *When power increase feature is applied to selectively boost the maximum conducted output power in specific wireless modes, or operating configurations without exceeding the maximum output (e.g., radiated output, allowed by the equipment certification).*

Rationale: redundant, in general, certifications are based on the maximum power operations that will already cover the worst-case scenario. We have not identified applicable cases for this PAG item



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Proposal for MPAG Review Scheduling System (I)

- Third iteration, following the last proposal of Apr. 2022 TCB workshop, for **MPAG scheduling process**
- The process is to allow applicants to ask for a scheduled **response date** for (large enough) MPAG reviews
- No additional tools required: process entirely managed **via KDB Inquiry tool**
- Process **already tested** in a “stealth” mode
- Suitable for large filings, and **months-ahead** product developments
- OET Lab **ready** to test the system for **actual use** (interim period)
- **Gained data** will drive improvements and allow for effectiveness evaluation



Proposal for MPAG Review Scheduling System (II)

- The general philosophy is to improve MPAG processing efficiency via **better resource allocation** thus leaving room also for conventional inquiries
- KDB Inquiry-based system to request FCC-scheduled **response date** on MPAG reviews
- Response is to provide **feedback** on MPAGs, **not necessarily approval**
- **Dates** set by FCC, based on workload and on first-come, first-served basis
- Only MPAGs that meets **specific criteria** are eligible for this process (to avoid overload)



Proposal for MPAG Review Scheduling System (III)

- Provisions for scheduling **additional feedback date** (up to a limit) when review **iterations** are needed so that TCBs may provide additional information
- Starting a Pilot-Program to **test** the overall **functionality**:
 - Start date to be announced via **TCBC monthly call** (likely Nov. 2022)
 - Preliminary **trial period** planned for **one year**
 - May be discontinued/modified **at any time** (without penalizing already submitted applications)
 - Process to be formalized in a **Notification Addendum** to KDB 388624



Outline of the Scheduling Process

1) TCB requests scheduling of MPAG review date

- TCB sends a KDB inquiry requesting a review date with information on number of devices (**number of FCC IDs**), number of applicable **PAG items**, date of **expected upload** of applications

2) FCC schedules a review date

- **Best effort** is made to meet the scheduled date, but it is **not binding**
- Any delay, albeit expected to be small (*e.g.*, a few days), communicated a.s.a.p.
- **Not an assurance** for approvals: questions, requests, or denials are also possible

3) After the review

- Requests for additional information will come with a **new scheduled review date** for the additional feedback (factoring in the need for additional lab. time, as needed)
- At FCC discretion, **repeated review iterations** due to incorrect\insufficient information, may result in **no further date scheduling**, reverting to standard process



Qualifying Requirements for MPAG Review Scheduling

- MPAG **size** threshold: MPAG will consist of **at least four PAG items** (to avoid “clogging” the system with a multitude of small MPAGs)
- Scheduled review date: requests shall be presented **minimum two calendar months** away from the planned **application upload** date.
 - **Example.** A request for MPAG scheduling comes in on February 3rd, the upload of applications by the TCB is scheduled by April 3rd.
 - This process may lead TCBs to opt for the “standard” process in many cases, while making this approach more suitable for **longer-term planned projects** not yet ready
- Requests shall include an **MPAG outline**: *e.g.*, device features, list of PAG items, variants from reference models, etc.
- Requests will not be considered **unless complete**.
- Each MPAG may relate to more than one FCC ID, but **only for identified variants of a reference model**, and for the purpose of approved test reductions



Example 1: Approaching MPAG Scheduling

- Manufacturer is planning for the certification of a new device that consists of two models (“A” and “B”, w/different FCC IDs), to be **fully tested separately**
- TCB receives manufacturer’s preliminary documentation, **reviews it**, and **identifies** required PAGs, to qualify for the MPAG Scheduling
- TCB reports that model “A” has **four** separate PAG items, while model “B” requires two PAGs.
- The two devices are tested independently, therefore require two separate MPAGs
- TCB informs the manufacturer that only model “A” **qualifies** for a request for MPAG review scheduling (based on minimum **number of PAGs** per MPAG)



Example 2: Approaching MPAG Scheduling

- Manufacturer is planning for a new device certification that consists of two models, **a reference and a variant**, each with different FCC IDs, after obtaining KDB-approved test **data referencing plan**
- A **single MPAG** can be filed for both the reference and variant
- TCB receives manufacturer's preliminary documentation, **reviews it**, and **identifies** required PAGs to qualify for the MPAG Scheduling
- TCB reports that model "A" has three separate PAG items, while model "B" requires only one PAG: the **combined** MPAG package with both models **qualifies** for MPAG Scheduling (based on the number of PAGs)
- TCB submits requests for MPAG review scheduling via KDB (via **new MPAG Scheduling Category**) with the information about PAGs and FCC IDs



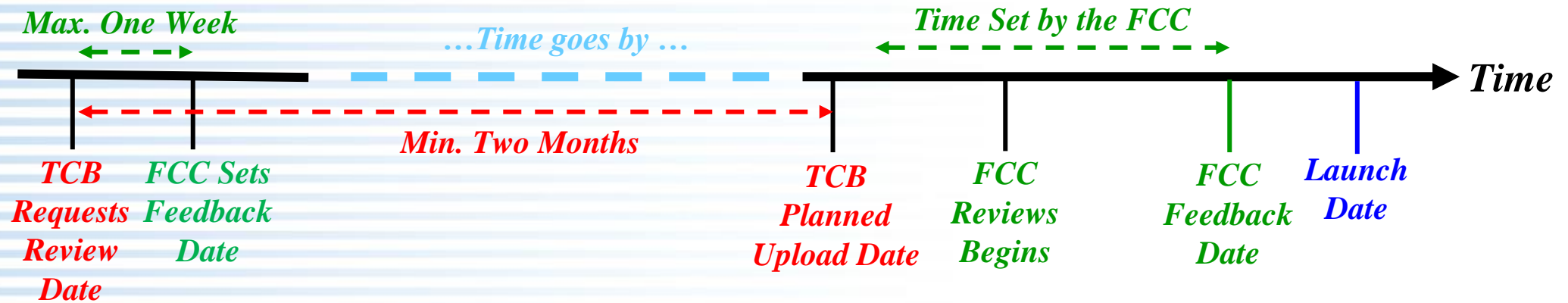
Example 3: How the MPAG Scheduled Review Works

- TCB **requests** for MPAG **review scheduling** with KDB containing list of PAG items, device description(s), and planned **application upload date**
- FCC **responds** with estimated **scheduled date** for MPAG feedback
- Lab **testing data** are sent to the TCB
- TCB **reviews** lab tests for **correctness** and files full applications on or before the stated application upload date
- On the scheduled date for feedback, **FCC responds** with a request for clarification, along with a **new scheduled feedback date** (to account for time required to collect the information)
- After receiving clarifications, on the **new scheduled date**, FCC clears the PAGs for grant processing



MPAG Review Timeline

- **Notional timeline** for the MPAG scheduled review process
- To be formalized in KDB 388624 annex document
- PAG items and applicable variants (number of FCC IDs) **named at the time of initial request** of review date scheduling
- All exhibits need to be filed by the **TCB-planned upload** date





Conclusions

- Work in progress designed to improve **efficiency** of PAG reviews
- **Checklists** are being added to PAG items, they need to be followed
- **Comments** on scheduling process welcome
- Trial period will provide important **tune-up feedback**